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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,944	08/21/2003	Jerry M. Brownstein	BROW0005	2977

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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1771

MAIL DATE

DELIVERY MODE

08/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/646,944

Applicant(s)

BROWNSTEIN ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57-60, 62, 63 and 65-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57-60, 62, 63 and 65-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. Claim 57-71 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the limitation that the mass is produced without coating the discrete recycled fibers to enhance their value as an absorbent
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 57, 60-61, 64- 70, 71, 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendes, U.S. Patent No. 5,779,392 in view of JP 63221187, O'Donnell et al, U.S. Patent No. 5,308,497 and DE 3,739,899 and Bogosian, U.S. Patent NO. 3,739,913. Mendes discloses a porous containment means having a plurality of hydrophobic, oleophilic organic fibers disposed therein to absorb and contain oil spills. See col. 3, lines 45-50. Mendes differs from the claimed invention because Mendes does not disclose employing delustered fibers and does not disclose that the fibers should be formed by shredding waste. JP '187 teaches that titanium dioxide which is a conventionally used delustrant can be incorporated into organic fibers which are to be used to absorb oil JP '187 teaches that titanium dioxide is an active filler and that it enhances the ability of the fibers to absorb oil. See abstract. Therefore, it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to have employed fibers which incorporated titanium dioxide as the oleophilic fibers in Mendes, motivated by the teaching of JP '187 that the use of the titanium dioxide will increase the ability of the fibers to absorb oil. With regard to the step of shredding waste materials, O'Donnell teaches shredding waste fibrous material in order form a fibrous material from the waste materials which can be used as an oil adsorbent. See col. 3, line 64-col. 4, line 15. O'Donnell teaches that shoddy is a suitable source for this waste material. See col. 2. lines 23-35. Therefore, it would have been obvious to have employed shredded waste materials in order to form the adsorbent materials of Mendes. One of ordinary skill in the art would have been motivated to employ waste material such as shoddy by the teaching of O'Donnell that such materials are suitable for use for this purpose. With regard to the length of the fibers and the amount of large pieces present in the mixture, O'Donnell teaches controlling the length of the fibers by how much shredding or grinding the fibers are subjected to. See col. 3, line 64-line 15.

4. With regard to the step of sorting the scrap, O'Donnell does not teach the step of sorting the scrap. DE '899 teaches that in methods wherein scrap materials are to be recycled for re use, that the natural and synthetic materials can be separated prior to shredding. See page 1 of the translation, first full paragraph. Therefore, it would have been obvious to have sorted the scrap in order to separate the different materials before the materials are further processed by shredding, etc., motivated by the teach of DE '899 that pre sorting before shredding produces clean separation of the natural and synthetic materials.

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5. With regard to the relative proportions of synthetic and natural fibers, DE '899 teaches using almost all natural fibers as the oil adsorbent material. Mendes and JP '187 teach using all synthetic fiber materials as the oil adsorbent material. O'Donnell teaches that natural fibers, synthetic fibers and blends of the two can be used, and does not specify particular amounts of each, although O'Donnell does teach an example of shoddy which comprises 50 percent cellulose and 40 percent polyester. Therefore, the person of ordinary skill in the art at the time the invention was made would have been motivated to employ all synthetic fibers, all natural fibers and blends of the two and would have been able to select appropriate amounts of each through the process of routine experimentation, in order to arrive at a material having good adsorption properties, which used the materials which were readily available and cost effective.
6. With regard to the newly added limitation that the mass is produced without coating the discrete recycled fibers comprising the mass to enhance their value as an absorbent, although O'Donnell does teach applying a coating to the materials to render them hydrophobic, it is noted that Mendes teaches employing hydrophobic fibers in the first instance. The person of skill in this art would have recognized that an additional hydrophobic coating would not be necessary and would add an additional expense to the process, since Mendes already teaches employing hydrophobic fibers. Further, the newly applied Bogosian reference teaches using recycled materials which can be a mixture of natural and synthetic fibers to form oil absorbing materials. See col. 2, lines 21-37.

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7. Claims 58-59, 63, 92-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendes, U.S. Patent No. 5,779,392 in view of JP 63221187, O'Donnell and DE '3,728,899 applied to claims above, and further in view of Mesek et al, U.S. Patent No. 4045833. Mendes does not teach the use of both long and short fibers.

With regard to the use of long and short fibers, Mesek et al teaches at col. 1, lines 52-68, that employing both long and short fibers in a nonwoven fabric enhances the strength, structural stability and integrity of the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed long and short fibers in the fibrous mass of Mendes. One of ordinary skill in the art would have been motivated to employ long and short fibers in order to enhance the strength and integrity of the nonwoven. It would have been obvious to have optimized the particular lengths and proportions of the fibers in order to obtain a nonwoven having the desired combination of strength and absorbency.

8. Applicant's arguments filed 5/30/07 and 4/9/07 been fully considered but are moot in view of the new grounds of rejection.

With regard to the newly added limitations, Applicant argues that the specification does not teach a coating step and therefore it provides support for the limitation reciting the absence of a coating step. However, any negative limitation or exclusionary proviso must have basis in the original disclosure. The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not

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have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. See *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 783 F.2d453 (Fed. Cir. 1984).

9. With regard to O'Donnell, Applicant argues that O'Donnell requires the use of a cross-linked resin coating on the fibers, in order to render them hydrophobic, while the instant invention does not use such a coating. However, O'Donnell applies the coating in order to render the fibers hydrophobic. Mendes already teaches employing hydrophobic fibers, therefore such a coating would not be necessary or required. Further, Bogosian teaches that mixtures of reclaimed natural and synthetic fibers can be used as oil absorbent materials and does not teach or require a further coating process. Also, it is noted that the omission of a step of element with the resulting loss of the function of that element is obvious. The person of ordinary skill in the art would recognize that O'Donnell teaches adding the coating in order to render the fibers hydrophobic in order to prevent them from absorbing excessive amounts of water. The person of ordinary skill would also recognize that employing an inherently hydrophobic fiber and/or limiting the amount of natural, (cellulosic), fiber would also achieve the same purpose, since cellulosic fibers absorb water. Therefore, the person of ordinary skill would have recognized alternative ways of achieving the result of limiting the water absorbency of the resulting material which are shown in the prior art such as by using an inherently hydrophobic fiber and/or by limiting the amount of cellulosic/natural fibers employed.

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10. Applicant's argument that none of the art teaches the sorting step. DE '899 teaches the presorting step. While DE '899 teaches employing the natural fibers as the oil adsorbent material, as set forth above, Mendes and JP '187 both teach employing the synthetic fibers, while O'Donnell teaches that reprocessed fibers which can be either, natural, synthetic, and mixtures of the two are useful in forming oil adsorbent materials. Bogosian also teaches mixture of natural and synthetic fibers, does not teach coating the fibers, and teaches using reclaimed fibers. Therefore, the prior art teaches that oil adsorbent materials can be made from all synthetic fibers, from all natural fibers, and from mixtures and blends of the two, and that the fibers can be reprocessed fibers, since such fibers are cost effective and environmentally friendly. Therefore, the person of ordinary skill in the art would have been able to select the particular types and amounts of fibers which produced the best and most economical adsorbent material through the process of routine experimentation. Applicant argues that DE '889 does not teach sorting plastic fibrous material but instead teaches separating household plastics from paper. However, DE '889 is not relied on for the teaching of fibrous material per se, but rather for the teaching that in the process of recycling, reclaiming mixed wastes, (waste which comprises both natural and synthetic polymeric materials), that the two types of wastes can be separated before further processing. The other art applied such as Mendes, O'Donnell and Bogosian teach employing fibrous plastic materials and teach shredding and process the waste plastics in order to form materials having the desired size, etc.

11. Applicant argues that none of the cited art teaches that the sorting process should be such that less than 10 percent natural fibers are included in the adsorbent. However, as set forth above, synthetic fibers, natural fibers and blends of both are all taught by the prior art and therefore, the person of ordinary skill would have been able to select the particular amounts and types of fibers based on what fibers were available and cost effective and what fibers produced the best adsorbent. The person of ordinary skill in the art would know that employing a higher percentage of cellulosic or natural fibers would increase the amount of water absorbed along with oil, while using hydrophobic synthetic fibers would decrease water absorption. However, the person of ordinary skill in the art would also know that cellulosic fibers are readily available and inexpensive. Therefore, the person of ordinary skill in the art would be able to arrive at the desired ratio of natural to synthetic fiber depending on the materials available, how much water absorption was considered to be detrimental, etc.

12. Applicant argues that O'Donnell requires the use of a resin. However, O'Donnell teaches that the coating improves the absorbency of the treated waste because it renders it selectively absorptive to oil and other hydrocarbons and prevents excess water absorption. However, as set forth above, Bogosian also teaches employing mixtures of natural and synthetic fibers and does not require any additional coatings. Further, Mendes teaches employing inherently hydrophobic fibers. The benefit which occurs due to the coating with the resin

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13. With regard to the steps of removing flags and large pieces of fibers, O'Donnell teaches that the steps of grinding and shredding can be performed until the fiber material has been processed to the desired length and degree of separation.

14. With regard to the Declaration previously submitted, as set forth in the previous action, the Declaration was sufficient to overcome the rejection set forth in the action of 3/29/06, however, since O'Donnell teaches the benefits of using shoddy to form the oil adsorbent material, the Declaration was not sufficient to overcome the rejection employing O'Donnell. Further as noted above, Bogosian teaches that reclaimed materials can be used without further coatings and/or treatment.

15. The Declaration under 37 CFR 1.132 filed 5/30/2007 is insufficient to overcome the rejection of claims based upon Mendes, U.S. Patent No. 5,779,392 in view of JP 63221187, O'Donnell et al, U.S. Patent No. 5,308,497 and DE 3,739,899 as set forth in the last Office action because: the Declaration states that the Declarant received the International Energy Globe award in the water category and also received a letter from Governor Christine Gregoire of Washington state commending the commercial success of the invention. However, in order to establish a showing of commercial success the affidavit or declaration must set forth the following: A nexus must be established between the claimed invention and the evidence of commercial success. The term nexus designates a factually and legally sufficient connection between the evidence of commercial success and the claimed invention so that the evidence of probative value in the determination of nonobviousness. The evidence of commercial success must be commensurate in scope with the claims. The commercial success must be derived from

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the claimed invention, must flow from the functions and advantages disclosed or inherent in the specification. Sales figures must be adequately defined. Gross sales figures do not show commercial success absent evidence as to market share. There must be a showing that the consumer is free to choose on the basis of objective principles and that the success is not the result of heavy promotion or advertising. The instant Declaration does not establish the required nexus and does not establish that the commercial success is relevant to the claimed invention, (i.e., that the commercial embodiment referred to in the declaration is the same as the claimed invention). Further, the Declaration does not set forth sales figures or other evidence of commercial success. The Declaration does not establish what the factors were in evaluating the invention for the award or for the letter of recognition received from the Governor and whether those factors are the same as or different than the required factors for establishing commercial success. Therefore, considering the record as a whole and the totality of the evidence the rejection is maintained.

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/

Primary Examiner, Art Unit 1771